# Current Engineering Directorate Configuration Management (EDCM) Statement of Work (SOW)

#### 1.0 Introduction

This statement of work (SOW) describes the requirements that shall be met by the contractor in the delivery of configuration management (CM) functions, services, and products in support of the Engineering Directorate (EA) at the Johnson Space Center (JSC). The contractor shall be responsible for the overall successful performance of the work necessary to provide the products and services required for fulfillment of this SOW.

## 2.0 Scope of Work

The contractor shall provide services and products that establish and maintain configuration management of EA products, services, and Quality management system (QMS) documentation of the Engineering Directorate (EA), Offices and Divisions. This function is further delineated into specific tasks that are performed within the scope of this contract. The selection and refinement of specific tasks will be described at the task order sub-level.

Quality management system (QMS) documents applicable to this Statement of Work are called out in the Statement of Work and Task Order and are available via the Organizational Master List, <a href="http://stic.jsc.nasa.gov/dbase/iso9000/master/master.cgi">http://stic.jsc.nasa.gov/dbase/iso9000/master/master.cgi</a>, via the JSC homepage. The web pages are continuously evolving; therefore, the contractor shall be responsible for ensuring the use of the most recent document revisions in the implementation of this contract.

#### 3.0 Configuration Management Function

The contractor shall provide CM support functions for the Engineering Directorate, Offices, and Divisions. CM Receipt Desks shall be utilized as the central locations for providing CM support functions. The Directorate-level CM Receipt Desk supporting the Directorate and Offices shall be located within the Engineering Directorate's Systems Engineering and Integration Office. Division-level CM Receipt Desks supporting the Divisions shall be located within the respective Divisions. The policies and procedures implemented shall be consistent with Engineering Directorate processes. Configuration management support functions follow.

3.1 Process and track change paper via an electronic database that provides logging and tracking of all documentation received by Directorate, Office, or Division configuration management receipt desks. Specific tasks include 1) receiving, 2) recording, 3) routing, and 4) tracking change paper. Directorate-generated change paper shall be retained by the associated Office or Division Receipt Desk; however, the change paper shall be transferred to the corresponding customer's change paper prior to routing it outside the Engineering Directorate.

- 3.2 Process and track requests to Directorate, Office, and Division personnel for inputs in response to Certification of Flight Readiness (CoFR) activities; Technical, Cost and Schedule Reviews (TCSRs); Metrics actions, Program Operation Plan (POP) cycles, Internal Task Agreement (ITA) activities, and other similar actions. Specific tasks include 1) distributing the request (or call) for the information, 2) tracking the response to the request, and 3) collecting the responses. Integration and analyses of the collected responses is not part of this function.
- 3.3 Provide configuration management for Engineering Directorate-level, Office-level, and Division-level configuration control boards and other review boards. The boards may include the Engineering Directorate Review Board (EARB); Engineering Directorate and Space Life Sciences Review Board (ESRB); Flight Readiness Reviews (FRR); and other Directorate-level, Office-level, and Division-level meetings as specified in the task orders. Specific tasks include 1) coordination of and publication of agenda; 2) utilization of an on-line real time agenda manager during meetings; 3) creation of and distribution of minutes; 4) tracking of actions and review item dispositions; and 5) archival of meeting documents, such as agendas, presentations, minutes, and other meeting materials.
- 3.4 Provide configuration management support for Directorate-level, Office-level, and Division-level products. Specific tasks include 1) control and maintenance of quality records including work instructions, forms, agreements, and meeting minutes to ensure official, archived copy is electronically available, stored, and retrievable; 2) action item transaction tracking; 3) change paper transaction tracking; and 4) electronic storage, access, and retrieval of electronic copies of Directorate quality records.
- 3.5 Provide notification and coordination of schedule information associated with change paper (for example, change requests, evaluations, directives) and configuration management products (for example, project life-cycle products). Specific tasks include 1) electronic means to exchange quality records within the Directorate and with Directorate customers, 2) electronic tracking of change paper being processed within the Engineering Directorate, 3) notification to Engineering Directorate personnel when topics associated with Directorate change paper are scheduled for customer review boards, and 4) coordination of project life cycle reviews with Office and Division personnel.
- 3.6 Conduct audits to reconcile as-built status versus as-designed status of hardware and software provided by the Directorate, Offices and Divisions. Specific tasks include 1) review of documents and hardware, 2) documentation of discrepancies between documents and hardware, and 3) summarizing and reporting findings. The documents to be reviewed include, but are not limited to, change records, requirements documents, engineering drawings, verification documents, acceptance data packages, and corrective-action and problem-reporting documents.

3.7 Assist in technical writing of QMS documents. Specific tasks include technical writing assistance and editorial assistance for document types as specified in sub level task orders.

# **4.0 Applicable Documents**

The following documents are applicable for the work performed under this Statement of Work. All documents are available via the Engineering Directorate Master Documents Lists of the Quality Management System (QMS). The Master Documents List is constantly evolving; therefore, the contractor shall ensure that the most recent revision of all documents applicable to this task order is utilized in performance of this task order.

Document	Document Title	
Number		
EA WI-023	Project Management of GFE Flight Projects	
EA WI-027	Configuration Management Requirements	
EA-WI-029	Flight Readiness Assessment	

## 5.0 Contract Deliverables

The contractor shall deliver the following products to the Technical Monitor Representative of each respective Task Order Sublevel.

	Deliverable	Task Order	Description	Frequency (F)
#		Sub Levels		Quantity (Qty)
				Metrics (M)
				Quality (Q)
1	NF533	Sub Levels 1,	Financial data reported at the	F: Monthly and Quarterly
		2, 3, 4,	contract level and the task order	Qty: On average per sub level task order
		5, 6, 7, 8, and 9	sub levels. (See DRD 3)	requesting, 12 NF533M and 4 NF533Q
				per contract year
				M: Delivered on time
				Q: No rework
2	Cost Summary	Sub Levels 1	Financial data that provides	F: One for each NF533 (for those
	of a subtask	(EA-CM5), 6	actual versus planned cost	subtasks requesting the additional
		(ER-CM1	details. This data is in addition	detail)
		ER-CM2	to NF533 data. This data is	Qty: One with every NF533M, or on
		ER-CM3), and	only required when requested	average per sub level task order
		8 (EV-CM4)	by a subtask of a task order sub	requesting, 12 per contract year
			level.	M: Delivered on time
				Q: No rework
3	Records	Sub Levels 1,	Quality records associated with	F: Daily, with multiple occurrences
		2, 3, 4,	delivery of services, products,	throughout the day dependent on the
		5, 6, 7, 8, and 9	or hardware provided by	rate of product flow
			Engineering Directorate, its	Qty: As an average per sub level task
			offices, and its divisions	order requesting, 5 per day
				M: Delivered within timeframe specified
				by task order sub level details

#	Deliverable	Task Order Sub Levels	Description	Frequency (F) Quantity (Qty)
				Metrics (M) Quality (Q)
				Q: No or minimal rework (exclusive of editorial changes due to requestor inputs)
4	Documents	Sub Levels 1 and 8	Directorate documents that define Directorate processes, standards, and policies.	F: Continual  Qty: As an average per sub level task order requesting, 2 in work per month  M: Delivered within timeframe specified by task order sub level details  Q: No or minimal rework (exclusive of editorial changes due to requestor inputs)
5	Metric Reports and CM Activity Status Reports	Sub Levels 1, 2, 3, 4, 5, 6, 7, 8, and 9	Metrics data that is obtained from the "change documentation log and status."	F: Weekly Qty: As an average per sub level task order requesting, once per week M: Data provided within specified timeframe.
				Q: Content and format of report meets expectations of requestor.
6	Audit Reports	Sub Levels 1 and 2	Compiled package of quality records that has been reconciled and verified.	F: One per instance Qty: As an average per sub level task order requesting, 3 per calendar year M: Delivered within timeframe specified by requestor Q: No or minimal rework (exclusive of editorial changes due to requestor inputs)
7	Change response packages for Directorate and Customer Program Boards	Sub Levels 1, 2, 3, 4, 5, 6, 7, 8, and 9	Data packages consisting of change requests, associated evaluations, presentations, email, and other associated documents.	F: One per change request Qty: As an average per sub level task order requesting, 5 occurrences per day M: Records exchanged within the prescribed timeframe Q: No or minimal rework because correct version of forms submitted and complete package of all applicable forms submitted
8	Meeting agendas	Sub Levels 1, 2, 3, 4, 5, 6, 7, 8, and 9	Listing of itemized topics to be presented or discussed during a Directorate-, office-, or Division-level meeting. Content for the agenda will be coordinated with the Directorate personnel requesting CM support for the meeting.	F: One per meeting for which CM support is provided Qty: As an average per sub level task order requesting, 5 per month M: Published within timeframe prior to meeting as specified by requestor Q: No or minimal rework (exclusive of editorial changes due to requestor inputs)
9	Meeting minutes	Sub Levels 1, 2, 3, 4,	Records of the discussions and decisions from a Directorate-,	F: One per meeting for which CM support is provided

#	Deliverable	Task Order Sub Levels	Description	Frequency (F) Quantity (Qty) Metrics (M) Quality (Q)
		5, 6, 7, 8, and 9	office-, or Division-level meeting.	<ul> <li>Qty: As an average per sub level task order requesting, 5 per month</li> <li>M: Published within timeframe after meeting as specified by meeting chair</li> <li>Q: No or minimal rework (exclusive of editorial changes due to inputs from meeting chair)</li> </ul>
10	Meeting actions	Sub Levels 1, 2, 3, 4, 5, 6, 7, 8, and 9	Database of actions assigned during a Directorate-, office-, or Division-level meeting. Action to include information such as who initiated the action, to whom it was assigned, the due date, open versus closed status, closure description, and any subsequent actions pursued in order to close the initial action.	F: Data updated after each meeting for which CM support is provided Qty: As an average per sub level task order requesting, 5 occurrences per month M: Published within timeframe after meeting as specified by meeting chair Q: No or minimal rework (exclusive of editorial changes due to inputs from meeting chair)
11	Schedules	Sub Levels 1, 2, 3, 4, 5, 6, 7, 8, and 9	Electronic schedule showing events, activities, tasks, and milestones. Task orders will provide details of the type of data to be tracked in the schedules.	F: Weekly, monthly, or for projects, updated prior to project reviews Qty: As an average per sub level task order requesting, 2 per month M: Provided within timeframe as specified by requestor Q: No or minimal rework (exclusive of editorial changes due to inputs from requestor)